



Novagen Innovations (Pty) Ltd. t/a Agri Novagenix
Company registration number: 2020/891524/07 ; VAT: 4150295469
PO Box 1224, Isando, 1600, South Africa

SAFETY DATA SHEET SUPREME

Reg. No. / Nr L11763 Act No. 36 of 1947 / Wet Nr 36 van 1947

Section 1. Identification of the material and the supplier

Product: **SUPREME**
Product Use: Insecticide
Restriction of Use: Refer to Section 15

Supplier: **Novagen Innovations (Pty) Ltd T/A Agri Novagenix**
PO Box 1224
Isando, 1600
South Africa
www.novagenag.co.za

Emergency No: POISON INFORMATION HELPLINE 0861 555 777
GRIFFON POISON CENTRE 082 446 8946
POISON CENTRE (UNITAS HOSPITAL) 012 664 1100
TYGERBERG 021 931 6129
RED CROSS 021 689 5227
RAPID SPILL RESPONSE 0800 775 3305

Date of SDS Preparation: 5 February 2025

Section 2. Hazards Identification

Classification of the substance or mixture

Globally Harmonised System, EU (GHS) and according to regulation EC No 1272/2008 [CLP]

Skin Sensitization Category 1; H317
Eye Irritation Category 2; H319
Specific Target Organ Target Single Exposure Category 3 Respiratory system; H335
Reproductive Toxicity Category 2; H361fd
Short term (Acute) aquatic hazard Category 2; H401
Long term (Chronic) aquatic hazard Category 2; H411

Label elements:

Globally Harmonised System, EU (GHS) and according to regulation EC No 1272/2008 [CLP]

Pictograms



Signal Word: **WARNING**

Hazard statement(s)

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H361fd: Suspected of damaging fertility or the unborn child.

H335: May cause respiratory irritation.

H411: Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

General:

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read carefully and follow all instruction.

Prevention:

P203 - Obtain, read, and follow all safety instructions before use.

P261 - Avoid breathing dust / fumes / gas / mist / vapours / spray.

P264 + P265 - Wash hands thoroughly after handling. Do not touch eyes.

P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

Response:

P302 + P352 - IF ON SKIN: Wash with plenty of water/soap.

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P318 - If exposed or concerned, get medical advice.

P319 - Get medical help if you feel unwell.

P321 - Specific treatment (see First Aid on this label).

P333 + P317 - If skin irritation or rash occurs: Get medical help.

P337 + P317 - If eye irritation persists: Get medical help.

P362 + P364 - Take off contaminated clothing and wash it before reuse.

P391 - Collect spillage.

Storage:

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

Disposal:

P501 - Dispose of contents/container in accordance with national regulations.

Supplemental Hazard Statements: none

2.3 Other

Other hazards

No other hazards known

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 3. Composition / Information on Hazardous Ingredients

Mixture

Suspension Concentrate

Spirotetramat 240 g/L

Globally Harmonised System, EU (GHS) and according to regulation EC No 1272/2008 [CLP]

Ingredients	Concentration of hazardous ingredient	CAS Number	Classification
Spirotetramat	24%	203313-25-1	Repr. Cat. 2; H361fd STOT SE Cat. 3; H335 Eye Irrit. Cat. 2; H319 Skin Sens. Cat. 1A; H317 Aquatic Acute Cat. 1; H400 Aquatic Chronic Cat. 1; H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4. First Aid Measures

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Routes of Exposure:

If in Eyes	Immediately flush eyes with plenty of water for at least 15 minutes holding the eyelids open. Remove contact lenses, if present, after the first five minutes. Seek medical assistance if irritation occurs.
If on Skin	Immediately flush body and clothes with large amounts of water and soap. Remove contaminated clothing and footwear. Wash affected areas with soap and water, if available with polyethylene glycol 400. Do not rub skin. Persons providing first aid must wear gloves to avoid self-contamination. Seek medical assistance if irritation occurs.
If Swallowed	Never give anything by mouth to an unconscious person. Do not induce vomiting unless instructed to do so by a physician. Rinse mouth if the patient is alert and able. For advice, contact the National Poisons Centre. with water. Seek medical assistance immediately.
If Inhaled	Remove patient to fresh air. Loosen clothing around neck. Lie down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical attention immediately.

Most important symptoms and effects, both acute and delayed

Symptoms: No known symptoms.

Treatment:

No specific antidote is known. Treat symptomatically and supportively. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is advisable.

Section 5. Fire Fighting Measures

Hazards from products	In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.
Suitable Extinguishing media	Water spray, Carbon dioxide (CO ₂), Foam, Sand Do not use a water jet due to contamination/spreading fog.
Recommended protective clothing & Precautions for firefighters	Wear SCBA and chemical-protective clothing which includes fire-fighting helmet, coat, trousers, boots, and gloves. Self-contained breathing apparatus is required. During a fire, smoke may contain the original material in addition to unidentified toxic and/or irritating compounds. Remove spectators from surrounding area and isolate the fire area. Use a recommended extinguishing agent for the type of surrounding fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Keep upwind and away from low areas where the fumes can accumulate. Eliminate ignition sources. Avoid inhaling hazardous vapours and fumes from burning materials. Remove container from fire area if possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal. Do not scatter the material. Dispose of extinguishing agent and spillage in a safe way at a later stage. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. Contain run-off water with, for example, temporary earth barriers. Additional provisions: Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. In the event of a fire, wear full protective clothing and self-contained breathing apparatus with full-face piece operated in the pressure demand or other positive pressure mode.

Section 6. Accidental Release Measures**Personal precautions:**

Wear appropriate safety clothing and eye/face protection. Do not inhale vapour or spray. Avoid contact with spilled product or contaminated surfaces. For personal protection see Section 8

Environmental precautions:

Do not wash into sewers or into any body of water (waterways, drains and groundwater). Advise water authority if spillage has entered water course or drainage system. If contamination of waterways, drains, rivers, or lakes is unavoidable, warn the local authorities (Police and Department of Water/Environmental affairs) immediately.

Spill and Disposal procedures:

Cleaning procedure:

Do not eat, drink, or smoke during the clean-up process.

Clear area of unprotected personnel and ensure adequate ventilation.

Eliminate all sources of ignition. Ground and bond all containers and handling equipment.

Control the spill at its source.

Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water.

Clean up spills immediately.

Do not breathe in vapours

Do not place spilled material back into the original container.

Do not re-use spilled material.

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly with water and a detergent, while observing environmental regulations. Avoid the use of solvents. Retain and dispose of contaminated wash water.

Waste Disposal: In accordance with local and national regulations. Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Dispose of properly. Clean up affected area.

Container Disposal: Refer to the product label for instructions. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Do not transport if this container is damaged or leaking.

Reference to other sections

Information regarding safe handling, see section 7.

Information regarding personal protective equipment, see section 8.

Information regarding waste disposal, see section 13.

Section 7.	Handling and Storage
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Precautions for Handling:

This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents. This material can become readily charged in most operations. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Avoid breathing vapours/spray/fumes. For personal protection see section 8.

KEEP OUT OF REACH OF CHILDREN and animals. Do not smoke near handling and storage area. Avoid breathing vapour or mist. Keep away from food, feed and eating utensils. Avoid contact with eyes, skin and clothing. Do not swallow. Keep the container closed. Use with adequate ventilation. Prevent

eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. After work, rinse gloves and remove protective equipment. Wash hands thoroughly with soap and water after handling, and before eating, tobacco use, drinking, or using the toilet. Wash contaminated clothing before re-use and separate from household laundry.

Precautions for Storage:

Store in original container only in a well-ventilated, cool, dry, secure area away from children, foods, animal feeds, and water supplies. Protect from heat, moisture and direct sunlight. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in properly labelled containers. Store in accordance with the particular national regulations. Do not store with the following product types: Strong oxidizing agents. Unsuitable materials for containers: None known.

Specific end use(s): Use only according to the label.

Section 8 Exposure Controls / Personal Protection

Occupational exposure limits:

Components	Control parameters
Spirotetramat	2.8 mg/m ³ (Time Weighted Average)

Engineering Controls / Industrial Hygiene

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. Maintain air concentrations below occupational exposure standards. Where necessary, seek additional occupational hygiene advice.

It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

Personal Protection Equipment

Eyes	Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).
Hands	Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness of 0,4 mm). Wash when contaminated and dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.
Skin	Wear standard coveralls and Category 3 Type 4 suit. If there is a risk of significant exposure, consider a higher protective type suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently. If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.
Respiratory	Respiratory protection is not required under anticipated circumstances of exposure. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation.

	Always follow respirator manufacturer's instructions regarding wearing and maintenance.
General	Keep away from food, drink and animal feedstuffs. No eating, drinking or smoking during use. Wash hands and face before breaks and after work. Suitable or appropriate respiratory and eye protection should also be worn. Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Section 9 Physical and Chemical Properties

Appearance	Liquid
Colour	Off-white
Odour	Characteristic
Odour Threshold	No data available
pH	4 - 7
Boiling/Melting Point	No data available
Freezing Point	No data available
Flash Point	> 100 °C
Flammability	Not classified
Upper and Lower Explosive Limits	No data available
Vapour Pressure	No data available
Relative Vapour Density	No data available
Bulk Density	Approx. 1.09
Water Solubility	Suspends in water
Partition Coefficient:	Formulated product: No data available Spirotetramat log K _{ow} = at pH 7, 20 °C: log K _{ow} = 2.51
Ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	Dynamic viscosity: No data available Kinematic viscosity: No data available.
Particle Characteristics	No data available
Surface tension	No data available

Section 10. Stability and Reactivity

Stability of Substance	Stable under normal conditions. Stable for 24 months. Avoid exposure elevated temperatures. Thermally stable at recommended temperatures and pressures. No decomposition if stored and applied as directed. Store below 50°C, preferably below 30°C, and not for prolonged periods in direct sunlight.
Possibility of hazardous reactions	None known.
Conditions to Avoid	Excessive heat, freezing, direct sunlight, open flames and heat.
Incompatible Materials	None known.
Hazardous Decomposition Products	None known or expected under normal conditions of use.

Section 11 Toxicological Information

Acute Effects:

Oral	GHS: Not classified
Dermal	GHS: Not classified
Inhalation	GHS: Not classified
Eye	GHS: Eye Irrit. Cat. 2
Skin	GHS: Skin Sens. Cat. 1

Chronic Effects:

Carcinogenicity	GHS: Not classified
Reproductive Toxicity	GHS: Cat. 2
Germ Cell Mutagenicity	GHS: Not classified
Aspiration	GHS: Not classified
STOT/SE	GHS: Category 3: Respiratory system
STOT/RE	GHS: Not classified

Section 12. Ecotoxicological Information

Ecological effects information	Fish: Spirotetramat: Sheepshead minnow: <i>Cyprinodon variegatus</i>: 96 hr. LC₅₀: 1.96 mg/L Bluegill sunfish: <i>Lepomis macrochirus</i>: 96 hr. LC₅₀: 2.2 PPM. Daphnia magna: Spirotetramat: <i>Daphnia magna</i>: Acute 48 hour EC₅₀ (mg l⁻¹): >42.7 mg/L. Algae: Spirotetramat: Acute 72 hour EC₅₀, growth (mg l⁻¹): <i>Raphidocelis subcapitata</i> (previously known as <i>Pseudokirchneriella subcapitata</i>: 72 hour: 0.96 g/L Formulated product GHS: Aquatic Acute Category 2 GHS: Aquatic Chronic Category 2 Birds: Spirotetramat: Bobwhite quail: >475 mg/kg BW/day Mallard duck: > 2000 mg/kg. Bees: Spirotetramat: Acute oral: LD₅₀ > 100 µg/bee Contact exposure: LD₅₀ > 170 µg/bee Worms: Spirotetramat: Acute 14 day: <i>Eisenia foetida</i>: LC₅₀ :100 mg/kg dry soil
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Persistence and degradability	Spirotetramat: Biodegradability: Spirotetramat: Not readily biodegradable. K_{oc} range 184-385 mL g⁻¹, soils =5 Stability in Water (1/2-life) Spirotetramat: Aqueous hydrolysis DT₅₀ (days) at 20 °C and pH 7: DT₅₀: 8.6. Aqueous photolysis DT₅₀ (days) at pH 7: 26.2 Product is not persistent.
Bioaccumulation	Bioaccumulation: Based on the LogP<3, the risk of bioconcentration is low. Partition coefficient: n-octanol/water(log Pow): log K_{ow} = -2.51
Mobility in Soil	Spirotetramat: K_d: 4.39, K_{oc}: 2.89. K_f: 4.08, K_{foc}:281, 1/n :0.941: EU dossier K_f range 3.70-4.79 mL g⁻¹, K_{foc} range 159-435 mL.g, 1/n range 0.823-1.042, Soils = 5 Moderately mobile.
Other adverse effects	This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB). This substance / mixture contains no ingredients that are on the Montreal Protocol list of substances that deplete the ozone layer.
Precautions:	Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method:

In accordance with local and national regulations. If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws. This product and its container must be disposed of by a waste treatment facility authorised to destroy waste in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) and the relevant waste management regulations. Do not dispose into, or allow contact with, municipal sewerage systems or open water bodies. Do not bury.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible. If containers cannot be recycled, they should be disposed of together with the waste chemical. Do not reuse empty containers. Empty containers retain product residue. Shake out thoroughly into the applicator. Consult provincial environment department for advice on waste disposal. Industrial/commercial waste may be handled at licensed facilities only. Waste shipments must be securely packaged and properly labelled. Only licensed carriers may be used for transport. If recycling, close container and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and take to a waste treatment facility authorised to destroy waste in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) and the relevant waste management regulations for disposal.

Special precautions during disposal:

Waste resulting from the use of this product cannot be reused or reprocessed. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Triple rinse containers, add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and take to a waste treatment facility authorised to destroy waste in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) and the relevant waste management regulations for disposal. If on-site container disposal is necessary, triple rinse empty container with water, add rinsate to the spray tank. Puncture top, sides and bottom, crush, and store appropriately until it can be taken to a waste treatment facility authorised to destroy waste in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) and the relevant waste management regulations for disposal. Empty containers and product should not be burnt.

Section 14 Transport Information

Rail/road (RID/ADR):

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (spirotetramat)
UN number	3082
Class	9
Packing group	III
Environm. Haz. Mark	Yes

Sea (IMDG code):

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (spirotetramat)
UN number	3082
Class	9
Packing group	III
Marine pollutant	Yes,
Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC code	Consult IMO regulations before transporting ocean bulk.

Air (ICAO/IATA):

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (spirotetramat)
UN number	3082
Class	9
Packing group	III
Environm. Haz. Mark	Yes

Section 15 Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety data sheet complies with the requirements of Regulation (EC) No.1907/2006.

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

Section 16 Other Information

Full text of H-Statements referred to under sections 2 and 3.

H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H361fd: Suspected of damaging fertility or the unborn child.
H400: Very toxic to aquatic life.
H401: Toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.
H411: Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS-Nr. Chemical Abstracts Service number
CLP Classification, Labelling and Packaging
ECHA – European Chemicals Agency
EC-No. European community number
ECx Effective concentration to x %
EU European Union
GHS Globally Harmonized System
IATA International Air Transport Association
IBC International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods
LCx Lethal concentration to x %
LDx Lethal dose to x %
MARPOL: International Convention for the prevention of marine pollution from ships
PBT Persistence, Bioaccumulation and Toxic
vPvB Very persistent and very bioaccumulative
RID Regulations concerning the International Carriage of Dangerous Goods by Rail
STOT SE Specific target organ toxicity single exposure.
STOT RE Specific target organ toxicity repeated exposure.
UN United Nations

For proper and safe use of this product, please refer to the approval conditions laid down on the product label. The data contained in this safety data sheet is based on our current knowledge and describes the product only with regard to safety requirements. The data does not describe the products properties. Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any existing laws and legislation are observed.

The information herein is given in good faith, but no warranty, express or implied is made.

Issue Date: 5 February 2025 Review Date: 5 February 2030